### STORMS AND WEATHER WARNINGS

#### WASHINGTON FORECAST DISTRICT

The disturbances that crossed the Washington forecast district during August were of slight or moderate intensity only, so that no storm warnings were required. Small-craft warnings were displayed, however, from Block Island, R. I., to Provincetown, Mass., on the 21st, and from Norfolk, Va., to Boston, Mass., on the 27th.

Frost warnings were issued for the cranberry bogs of

New Jersey on the 28th.—C. L. Mitchell.

#### CHICAGO FORECAST DISTRICT

The weather of August, 1925, in this district was virtually uneventful, so far as the occurrence of conditions calling for special warnings is concerned. Only a few winds of storm force occurred on the Great Lakes, and most of these were of brief duration and in connection with thunderstorms. The only warnings issued for the benefit of shipping were those on the 28th for small craft on western Superior, and on the 8th and 22d for the same interests by the officials at Alpena, Mich., and Houghton, Mich., respectively.

Warnings for light frost were issued on the 20th and 25th for the northwestern portion of the Wisconsin cranberry marshes. The first warning was verified, while in the second instance the minimum bog temperature was 33°. Frost warnings were issued also on the 24th and 29th for areas in the northern Rocky Mountain region,

and were, for the most part, verified.

Fire-weather forecasts were made during the entire month for western Montana, and similar forecasts were begun on the 28th for northeastern Minnesota, where the situation had become acute.—C. A. Donnel.

## NEW ORLEANS FORECAST DISTRICT

In forecasting for this district in summer close attention is given to the movements and characteristics of the predominant areas of high pressure over the interior and the Atlantic coast sections of the United States. During August, 1925, the feature of principal importance in this district was the prevalence of extensive anticyclonic areas, which in extending their influence southwestward, with a rise in pressure over the Gulf States, were attended by rains along and near the Gulf coast. In successive instances unsettled weather prevailed only one or two days with this condition, until another HIGH from the west united with the extensive eastern HIGH, after which the anticyclone thus formed over the Central States moved eastward, and the southwestward thrust occurred as before.

The prevalence of conditions of this type resulted in a marked deficiency of rainfall in the interior sections of this forecast district, with temperature above normal, while along the coast the rainfall and temperature averaged nearer the normal values. Pressure gradients were generally slight and stormy weather did not develop; therefore no warnings were required.—R. A. Dyke.

### DENVER FORECAST DISTRICT

The month was cool and showery, especially in western Colorado and southern Utah. There was only one day without showers somewhere in the district. There were two such days in Colorado, seven in New Mexico, and nine each in Arizona and Utah. No occasion arose for weather warnings of any kind.—E. B. Gittings, jr.

## SAN FRANCISCO FORECAST DISTRICT

During August, 1925, both temperature and precipitation were about normal. There were no periods of abnormally high temperature, and the only rainfall of importance occurred in Washington and western Oregon on the 22d and 23d, when a small depression appeared over British Columbia. Frequent thunderstorms oc-curred in the Plateau region and the mountain regions of California.

The most important meteorological features of the month were: (a) The absence of "hot waves" which usually occur in August in this district, and (b) the reverse direction of the winds along the California coast. Usually strong northwest winds blow almost continuously during July and August, but during the past August the prevailing winds were from the south and southwest and were light in force.

In connection with the above it is well to note that the north Pacific area of high barometer was central farther west and south than usual and also that the readings near its center were much above the normal. It seldom impinged strongly on the coast and on these occasions only for short periods, after which it would again recede into the ocean without the usual secondary HIGH passing inland and causing a "hot wave."

Forest fire-weather warnings were issued in California on the 3d, 15th, and 24th, and were timely and appreciated by the forest interests. No storm warnings were

issued and none were necessary.—G. H. Willson.

## RIVERS AND FLOODS

# By R. E. SPENCER

The only flood of importance during August occurred in the first week in the lower Rio Grande; report thereon will probably appear in the September number of this REVIEW. Other floods, resulting in all cases from heavy local rains and confined chiefly to the Southwest, were without material consequence aside from one railroad washout in western Colorado and some local damage at Kiowa, Colo.

Owing to the persistent drought in the Southern States rivers in that section continued, as in June and July, unusually low. At the end of August low-water records had been broken in a number of streams, the generation of hydroelectric power was considerably reduced in several States, and many localities were threatened with a serious shortage of water for direct consumption. A more comprehensive report on this subject will appear in a later issue of this Review, probably that for September, 1925.

River	Station	Flood stage	Above flood stages—dates		Crest	
			From-	То—	Stage	Date
Mississippi drainage: Purgatoire Canadian	Higbee, Colo Logan, N. Mex	Feet 4, 5	5 5 7 10	10	Feet 1 6.0 1 4.0 2 5.0 4.6	5 5 7 10
Rio Grande Pacific drainage:	San Benito, Tex.	21	5	5	21. 4	5
Glla	Kelvin, Ariz	5	1		5. 0 6. 5 5. 0	1 6 30

<sup>1</sup> Highest reading reported—probably crest.